

Road Erosion Measurements from the Eastern Cascades

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The purpose of this study was to measure sediment production and particle sizes from road erosion under the snowmelt-dominated conditions of the east Cascade Range and to compare these results with sediment yield from other road erosion studies. These data were used to evaluate the Washington State watershed analysis model for road sediment production. Results indicate that road erosion for eastside Cascade conditions is less than most other areas of the Pacific Northwest, but generally of the same order of magnitude. The data also indicate that the road erosion model from watershed analysis in some cases does not provide estimates of road sediment production consistent with the scientific literature. The particle size distribution of eroded sediment in this study was coarser than reported by other researchers. Sand-sized sediment eroded from native surface roads may have a greater opportunity to negatively impact the quality of spawning gravel than previously suspected.

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